

Application/Control Number: 09/775,970

Page 2

Art Unit: 2863

CLMPTO FOR AMDT FILED 04/01/03.

CANCEL CLAIMS 1-3

4. A liquid crystal Fabry-Perot etalon comprising:
  - a first substrate coated on a first side with a first transparent conductor layer;
  - a first reflector layer disposed over the first transparent conductor layer on the first side of the first substrate;
  - an alignment layer disposed over the first transparent conductor layer on the first side of the first substrate;
  - a second transparent conductor layer;
  - liquid crystal filled in between the alignment layer and the second transparent conductor layer; and

**BEST AVAILABLE COPY**

a second substrate coated on a first side with a second reflector layer, the first side of the second substrate facing the first side of the first substrate;

wherein the first transparent conductor layer and the second transparent conductor layer are each etched so as to form multiple independent etalons.

5. The liquid crystal Fabry-Perot etalon of claim 4, wherein the first and second transparent conductor layers are etched according to a grid pattern.

6. The liquid crystal Fabry-Perot etalon of claim 4, wherein the first and second transparent conductor layers are etched according to a wedge pattern.

7. The liquid crystal Fabry-Perot etalon of claim 4, wherein the first and second transparent conductor layers are etched using a laser.

8. The liquid crystal Fabry-Perot etalon of claim 7, wherein the first and second transparent conductor layers are etched using an Nd:YAG laser.

9. The liquid crystal Fabry-Perot etalon of claim 4, wherein each of the multiple independent etalons is independently tunable to different wavelengths.

10. The liquid crystal Fabry-Perot etalon of claim 4, wherein each of the multiple independent etalons comprises as an independently tunable filter.

11. The liquid crystal Fabry-Perot etalon of claim 4, wherein the second transparent conductor layer is coated on the second substrate.

12. The liquid crystal Fabry-Perot etalon of claim 4, further comprising:  
a spacer plate disposed between the first substrate and the second substrate,  
wherein the second transparent conductor layer is coated on the spacer plate.

CANCEL CLAIMS 13-25.